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Subcommittee on Forests and Forest Health

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Wildland Fire Issues Related to Forests and Forest Health

Good morning Mr. Chairman and members of the Subcommittee. My name is Jim Hubbard and I am the State Forester and Director of the Colorado State Forest Service (CSFS). The responsibilities of CSFS employees involve providing expert advice and technical assistance to non-federal landowners and communities in the areas of forest management; insects, disease and other forest health issues; urban forestry; conservation education and, of course, fire protection.

Since the end of April, the focus of nearly all of our employees has been on responding to wildfire – through direct suppression, through mitigation assistance to worried homeowners, through coordination and training of local resources – as it spreads northward through the state.

The statistics from the 2002 Fire Season are already record setting, not only in terms of acres and cost but in risks to lives, property and essential community infrastructure. Given the current drought and condition of the forest, these numbers are hardly unexpected. But if we cannot collectively find a way to treat the hazardous fuels that are feeding these fires, across boundaries and on a meaningful scale, this season's statistics threaten to become the rule rather than the exception.

Colorado's 2002 Fire Season – So Far

Beginning with the Snaking Fire in April, Colorado has recorded at least 1,046 fires that have burned 364,000 acres at a cost of $100 million. This compares to the state's ten-year seasonal average of 3,119 fires and 70,770 acres. Seventeen of these fires exceeded county capability and invoked the state's Emergency Fire Fund (EFF). Fourteen fires have been declared FEMA incidents indicating imminent and substantial threat to life and property. Five of the state's largest fires in recent history have occurred this season.

An estimated 77,000 Colorado residents have been evacuated from their homes for periods of a few days to several weeks. Three hundred sixty-six homes have been lost as well as 981 other structures. This damage has resulted in costs to the insurance industry in excess of $80 million – many times greater than the previous high of $18 million following the Hi Meadow and Bobcat Fires.

Twenty-five percent of large fire damage has occurred on private or other non-federal land where technical and financial assistance for emergency and long-term rehabilitation are much harder to come by.

Wildfires impacts on vital resources such as water quality and supply, air quality, wildlife and their habitat, local infrastructure and economies and recreation opportunities have also been staggering. Due to the early start of the fire season, wildlife biologists are discovering heavy impacts from the blazes, particularly among young and newborn animals. At least two herds of elk were trapped and killed in the Hayman Fire. And critical fish habitat will suffer from increased water temperatures, immediate sedimentation, changes in water chemistry and impacts on prey base.

The Denver Water Board, which supplies drinking water to 3 million customers, is bracing for rehabilitation costs around Cheesman Reservoir in excess of $100 million. The 1996 Buffalo Creek Fire occurred 3 miles north of the Hayman site and burned 12,000 acres in a sub-drainage of the South Platte River. Since that time, Denver Water has spent more than $20 million to address subsequent sediment and debris. By comparison, the Hayman Fire has consumed 137,000 acres in the river's main drainage and on all sides of the city's primary water collection reservoir.

The most amazing success story of the 2002 season is the fact that 98 percent of reported fire starts have been contained through initial attack by local resources. Without the effectiveness of these firefighters, many of whom are volunteer, Colorado would have many more large fires with which to contend. Governor Bill Owens recognized the severity of the fire season very early and authorized funding for additional resources to strengthen the state's initial attack capability. This assistance has provided much needed air support, as well as additional regular and inmate crews, to bolster local capability.

Why Is This Season So Bad?

Many of Colorado's forests are unnaturally dense, concentrated in older age classes and vulnerable to insect and disease attack, catastrophic wildfire and other types of damage at an inordinately vast scale. They are, in fact, waiting for this type of regenerative disturbance to rejuvenate and diversify forest structure. Decades of fire exclusion have left so much fuel in the forest that when disturbance does occur, it often happens at a scale that devastates the landscape rather than revitalizing it. Drought further exacerbates these conditions by reducing even live grasses, shrubs and trees to 4 percent fuel moisture – drier than kiln dried lumber and far below the 10 percent level that triggers alarm among western fire managers.

At least one million Coloradoans live within these high-risk forests in areas commonly referred to as the wildland-urban interface (WUI) or, in Colorado, as the Red Zone. Since April, thousands of interface residents, on both sides of the Continental Divide, have been evacuated from their homes and forced to spend much of their summer in shelters or with family and friends wondering if their property will survive.

The risk to human safety grows exponentially in the complicated interface environment. Local fire departments, both municipal and volunteer, provide initial attack on most of the state's

interface fires. These first responders arrive facing the need for evacuations, subdivisions with inadequate access, lack of available water supply and structures built with highly combustible materials. This already confusing situation becomes even more difficult on large fires when local resources transition to interagency teams for extended attack.

A substantial body of research shows that forest management activities such as thinning and prescribed burning can significantly mitigate wildfire risks in the interface. The challenge is to implement these treatments on a meaningful scale. The attached map showing the boundaries of the Hayman Fire demonstrates the potential for treatment areas to slow even extreme fire behavior. On the northeast flank of the fire, the previously burned sites of the Schoonover Gulch Fire and the Polhemus Prescribed Fire stopped the main head of the Hayman Fire from spreading. This occurred on a day when plans were in place to evacuate 40,000 homeowners in the fire's path.

The CSFS, in partnership with federal agencies and local contractors, has assisted hundreds of landowners with mitigation on more than 10,000 high-risk acres. In some cases, this has resulted in treatment of entire subdivisions, including perimeter fuel breaks. But most often it involves fuel reduction on individual properties, which remain at risk from untreated areas on adjacent private, non-federal and federal lands.

The fire behavior seen in Colorado this season has important implications for those considering how best to mitigate wildfire risks to communities in the interface. The intensity of the state's large fires is such that a home, a subdivision or even a community could not be protected if fuel reduction activity had not occurred across the larger landscape as well as around individual properties. In the West, this means we need to be more aggressive in treating federal lands in proximity to interface communities or vital community infrastructure.

In order to truly reduce wildfire risks to communities and restore fire as a more natural part of the ecosystem, treatment must occur across boundaries, on a landscape scale and over the long-term. Existing environmental clearance processes take so long that federal agencies are not able to keep pace with the protection requirements of the interface.

The level of activity needed will require support and involvement from local communities and an approach to development and prioritization of projects that incorporates local protection priorities and preferences for treatment options. There is agreement across a spectrum of interests that the risk to life, property and communities in the interface must be reduced. We must find a way to harness that agreement and use it to inform a new kind of project review process that facilitates greater – and more timely – work on the ground.

The wildland-urban interface is a set of conditions that is particular to each state's combination of people, geography and fuels. The interface definition previously published in the Federal Register allows states the necessary flexibility to identify their own high-risk areas within national guidelines. Project implementation will be further expedited by adopting the Federal

Register definition and by allowing states to prioritize treatment activity and resources according to local assessments of values-at-risk – whether that means action within a subdivision or in the surrounding watershed.

<u>What Is Needed to Protect Western Communities in the Short-Term?</u>

In the short term, interface communities across the West would benefit from **accelerated hazardous fuel treatment across boundaries**, genuine and active **coordination** between local, state and federal response

entities, **emergency rehabilitation** assistance and greater focus on synthesis and application of interface research in the intermountain West.

Implementation of hazardous fuel treatments across the landscape could be accelerated through the cooperative development of **Best Management Practices** (BMPs) for activity in the interface. This kind of collaboration could simplify the clearance process for federal activities by facilitating needed agreement on priorities and principles for mitigation and for subsequent action on a meaningful scale.

Coordination between local, state and federal fire management and response agencies must also be improved in the short term, specifically in the prioritization of fuel treatment projects, the strengthening of initial attack efforts, the delivery of program assistance to volunteer fire departments and the integration of available resources for extended attack in the interface. Congressional direction that prioritizes related appropriations according to this kind of multi-level coordination could assist in promoting action. The new Wildland Fire Leadership Council (WFLC) is a good coordination model and the Chairman is to be commended for his support of this effort. But non-federal involvement in the Council must remain strong and similar coordination must occur at the regional and local levels as well.

Colorado, alone, has emergency fire rehabilitation needs in excess of $50 million. For private landowners, the NRCS's Emergency Watershed Protection Program is the only source of rehabilitation assistance. This program is currently unfunded and needs to be replenished immediately to meet existing and future demand from the 2002 season.

Finally, the Interior West has a serious need for a synthesis of current science on mitigation and response to interface fire under existing extreme conditions. This compilation and analysis of research should address fire behavior, utilization of products from fuel treatments and a new approach to integration of firefighting resources in the interface. Congress could address this need on a short-term basis by establishing a focused center for interface training and research.

What Is Needed To Reduce Wildfire Risks Over The Long-Term?

The Ten Year Comprehensive Strategy and Implementation Plan, recently endorsed by the Secretaries of Agriculture and Interior and the Western and Southern Governors' Associations, lays out an excellent long-term plan for reducing risks to communities and restoring fire-adapted

ecosystems. I encourage Congress and the Administration to work together to ensure that the necessary funding and support are provided to carry-out the specified activities in these documents.

Community involvement in the planning, prioritization and implementation of wildfire risk reduction projects on both federal and non-federal land is a key component of the Ten Year Strategy. The Community and Private Land Fire Assistance (CPLFA) Program, authorized in the 2002 Farm Bill, provides the ideal combination of planning, technical and financial assistance to facilitate this involvement. Although it was funded at $35 million in the FY 2001 Interior Appropriations Bill, the CPLFA is currently unfunded in FY 2003 bills moving through both the House and Senate. I urge Subcommittee members to work with their colleagues to restore funding to this vital component of the National Fire Plan (NFP) in the House Appropriations Bill and to increase the overall emphasis in NFP funding from preparedness and suppression

to community assistance and long-term restoration.

I further encourage Congress and the Administration to recognize the emergency nature of suppression costs and appropriate funds needed above and beyond regular budgets on an emergency basis. Asking agencies to rob fuel treatment, community assistance, restoration or related National Fire Plan accounts to cover these costs will only hinder the implementation of a balanced, long-term fire program as described and agreed to in the Ten Year Comprehensive Strategy.

Conclusion

The condition of Colorado's forests and the accompanying risk from wildfire took more than a century to develop. It is not something any single agency can solve alone and it will not be restored overnight. But we must begin immediately to increase our risk reduction activity in the wildland-urban interface. Land management agencies and related interest groups must come together at local, state and national levels to establish agreement on guidelines and priorities for treatment and then move rapidly to accelerate action on the ground. Better coordination of interface suppression response among all jurisdictions will further improve community protection. And, ultimately, we must work at all levels to establish a mechanism for long-term commitment to protecting life, property and natural resources.